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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/780,621

02/19/2004

Takashi Imai

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EXAMINER

HASSAN, AURANGZEB

ART UNIT

PAPER NUMBER

2182

MAIL DATE

DELIVERY MODE

07/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/780,621

Applicant(s)

IMAI, TAKASHI

Examiner

Aurangzeb Hassan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/23/07.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/23/2007 has been entered.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the limitation "first step" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-6, 9-14, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Kanai et al (US Publication Number 2004/0153597 hereinafter "Kanai").

7. As per claim 1 Kanai teaches an information processing apparatus capable of communication with an external unit connected thereto, comprising: a connection unit for connecting said external unit (transceiver 25, figure 3); a USB device controller connectable with said external unit for controlling communication between said connected external unit and said information processing apparatus (USB function controller 24 connectable to external USB function device 200, figure 3); a USB host controller connectable with said external unit for controlling communication between said connected external unit and said information processing apparatus (USB host controller 23 connectable to external USB host device 100, figure 3); and a switching unit for selecting said USB device controller or said USB host controller as a controller connected with said external unit, for communication between said connected external

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unit and said information processing apparatus (Switching control register 27C, figure 3).

The Examiner notes that the information processing apparatus and USB controllers of Kanai are "capable" of communication and "connectable" to a multiplicity of devices and no teaches of Kanai stipulate that the "capable/connectable" steps of the claim limitations cannot be accomplished by the prior art.

8. As per claims 9 and 17, Kanai teaches an apparatus, method and computer-readable storage medium, for an information processing apparatus capable of communication with an external unit connected thereto via a connection unit (transceiver 25, figure 3), comprising: a device control step of controlling, using a USB device controller connectable with the external unit via the connection unit, communication between the connected external unit and the information processing apparatus (USB function controller 24 connectable to external USB function device 200, figure 3); a host control step of controlling, using a USB host controller connectable with the external unit via the connection unit, communication between the connected external unit and the information processing apparatus (USB host controller 23 connectable to external USB host device 100, figure 3); and a switching step of selecting execution of said device control step or execution of said host control step as a control step of controlling communication between said connected external unit and the information processing apparatus (Switching control register 27C, figure 3,

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paragraphs [0057 – 0059]).

9. As per claims 2 and 10, Kanai teaches an apparatus and method wherein said switching step further comprises a determination step of determining the type of the connected external unit (CPU 21 part in switching determination, figure 3), and includes selecting execution of said device control step or execution of said host control step as said control step for controlling the communication between the external unit and the information processing apparatus (multiplexer 29 part in selection, figure 3), in correspondence with the determined type of said external unit (switching determines whether the host device or function device is connected, paragraph [0060]).

10. As per claims 3 and 11, Kanai teaches an apparatus and method wherein if it is determined in said determination step that the external unit is a USB host unit in conformity with the Universal Serial Bus communication standards, then said device control step is selected in said selection step, so as to perform communication between the external unit and the information processing apparatus in said device control step (USB communication of host with device, figure 4, paragraphs [0063 – 0064]).

11. As per claims 4 and 12, Kanai teaches an apparatus and method wherein the connection unit is an AB type connector in conformity with the Universal Serial Bus communication standards, and wherein if a B type connector is connected with said connection unit, it is determined in said determination step that the external unit is the

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USB host unit (131, figure 9).

12. As per claims 5 and 13, Kanai teaches an apparatus and method wherein if it is determined in said determination step that said external unit is a USB device unit in conformity with the Universal Serial Bus communication standards, said host control step is selected in said selection step, so as to perform communication between the external unit and the information processing apparatus in said host control step (USB communication of device with host, figure 4, paragraphs [0063 – 0064]).

13. As per claims 6 and 14, Kanai teaches an apparatus and method wherein the connection unit is an AB type connector in conformity with the Universal Serial Bus communication standards, and wherein if an A type connector is connected with the connection unit, it is determined in said determination step that the external unit is the USB device unit (231, figure 9).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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15. Claims 7, 8, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanai in view of Ying et al. (US Publication Number 2003/0172223, hereinafter "Ying").

16. As per claims 7 and 15, Kanai teaches an apparatus and method comprising: an execution status determination step of determining an execution status of said device control step and said host control step (switching determines whether the host device or function device is connected, paragraph [0060]).

Kanai fails to teach a warning step of, if it is determined in said execution status determination step that said device control step or said host control step is in execution, and said control step, selected from said first step and said host control step in correspondence with the type of the external unit determined in said determination step and controlling communication between the external unit and the information processing apparatus, is in execution, giving a warning to an operator of the information processing apparatus, wherein in said selection step, said control step that is in execution is selected as said control step of controlling communication between the external unit and the information processing apparatus.

Ying analogously teaches an apparatus and method comprising: a warning step of (busy, paragraph [0034]), if it is determined at said execution status determination step that said device control step or said host control step is in execution, and said control step, selected from said device step and said host control step in correspondence with the type of said external unit determined by said determination

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step (connected and induced from the data input ends D+ and D-, paragraphs [0030-0032]) and controlling communication between said external unit and said information processing apparatus, is in execution, giving a warning to an operator (displayed as red, yellow and green, paragraph [0040]) of said information processing apparatus, wherein at said selection step, said control unit in execution is selected as said control step of controlling communication between said external unit and said information processing apparatus.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Kanai with the above teachings of Ying. One of ordinary skill in the art at the time of the applicant's invention would have been motivated to make such modification in order to be able to clearly tell the user the current situation of the host, in a USB switching environment so the user may operate under a friendlier atmosphere (paragraph [0016]).

17. Kanai modified by the teachings of Ying as applied to claims 7 and 15 above, as per claims 8 and 16, Ying teaches an apparatus and method wherein if it is determined in said use status determination step that said control step in execution is no longer in execution (red light displayed when sharer is busy and host can not switch, paragraph [0040]), said control step that has been in execution is selected in said selection step as said control step of controlling communication between the external unit and the information processing apparatus (yellow light displayed when host is not in an online state and no other host is using the USB, paragraph [0040]).

Response to Arguments

18. Applicant's arguments with respect to claims 1 – 17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Publication Numbers 2003/0175025 and 2003/0023804 and US Patent Number 6,549,958 teach a first and second connector with a switching mechanism via a controller.

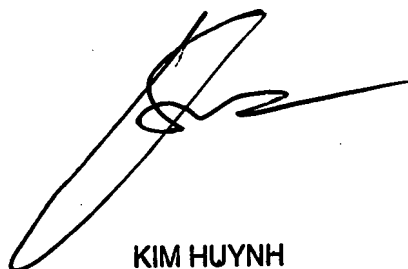
20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571) 272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH



KIM HUYNH
SUPERVISORY PATENT EXAMINER

7/9/07